



# UNITED STATES PATENT AND TRADEMARK OFFICE

*ca*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,749	08/14/2003	Neena Gandhi	30319.361	1748
22828	7590	07/09/2007		
EDWARD YOO C/O BENNETT JONES 1000 ATCO CENTRE 10035 - 105 STREET EDMONTON, ALBERTA, AB T5J3T2 CANADA			EXAMINER MI, QIUWEN	
			ART UNIT 1655	PAPER NUMBER
			MAIL DATE 07/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/604,749

Applicant(s)

GANDHI ET AL.

Examiner

Qiuwen Mi

Art Unit

1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 9-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's amendment in the reply filed on 6/12/07 is acknowledged.

#### **Election/Restrictions**

Applicant's election with traverse of claims 1-8 in the reply filed on 1/10/2007 is maintained. The traversal is on the ground(s) that searching for all the claims is not a burden. This is not found persuasive because as stated previously the product as claimed can be made by another and materially different process, such as genetic engineering, thus a different search exists. Applicant is reminded of the extensive literature search in biotechnology which is not co-extensive.

The requirement is still deemed proper and is therefore made FINAL.

Claims 9-13 are withdrawn from further consideration as being drawn to nonelected inventions.

#### **Claims Pending**

Claims 1-13 are pending. Claims 9-13 are withdrawn. Claims 1-8 are examined on the merits.

#### **Claim Rejections –35 USC § 103**

Art Unit: 1655

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibi (US 5,612,077) in view of Sumi et al (US 4,649, 052), Kodera (US 5,093,122), and further in view of Kominato et al (US 3,626,003).

Hibi teaches a method of processing garlic and ajoene-containing edible oil products by adding water to raw garlic (the same as *Allium sativum* (see the instant specification, page 9) bulbs (macerating tissue), and incubated at 4 °C (less than 30 °C) for 3 hours (5 min or longer). Garlic and water was mashed using a food processor (grinding the tissue) (col 5, lines 15-22). pH value was adjusted with sodium hydroxide (alkaline hydroxide) (neutralizing) (col 5, lines 25-30). Ethyl alcohol was added and mixed into the specimens (extracting) (col 7, lines 55-60).

Hibi does not teach evaporating the ethanol, neither does Hibi teach hexane and species *Allium cepa*.

Sumi et al teach the production of garlic powder by concentrating the garlic paste (containing Japanese seasoning alcohol (obtained by saccharifying an intimate mixture of ethyl alcohol) and glutinous rice in 10% alcohol) by vacuum evaporation (col 15, lines 45-55).

Kodera teaches the preparation of S-allylcysteine from garlic and onion (*Allium cepa*, col 2, lines 40-45) by adding 300 ml of water, homogenized for 3 min, adjusted pH using NaOH (col 4, lines 15-22), and extracting with ethanol.

Kominato et al teach the isolation and extraction of garlic and onion (the same as *Allium cepa*, see instant specification, page 9) (col 5, lines 65-75). Cloves of garlic and onion were grounded, extracted with solvent hexane (defat), and the remainder was used as the raw material (col 6, lines 5-12).

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to evaporate ethanol in Sumi, use the species *Allium cepa* in Kodera, and use the solvent hexane in Kominato et al to make the ajoene-containing edible oil products in Hibi since Sumi teaches that the method provides the production of non-odorous garlic paste without entailing any emission of the irritant odor of garlic during the course of the products (col 1, lines 43-48); Kodera teaches the invention produces a composition through simple operation at low cost (col 1, lines 55-60); Kominato et al teach the invention plays an important role in the taste and nutrition of the foods (col 2, lines 40-45), and is useful for fat removal of fatty livers and for strengthening livers (col 3, lines 1-5). Since all the methods in yielded beneficial results, one of ordinary skill in the art would have been motivated to make the modifications. The result-effective adjustment in conventional working parameters (e.g.,

Art Unit: 1655

determining an appropriate amount incubation time) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

From the teachings of the references, it is apparent that one of the ordinary skills in the art would have had a reasonable expectation of success in producing the claimed invention.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

Applicant argues that ethanol is not used to extract the desired compound, it is simply mixed with the garlic juice. This is not found persuasive. The reference clearly states that ethyl alcohol was added and mixed into the specimen (col 7, lines 5-60). Applicant needs to take out the textbook and review the definition of extraction. For instance, both maceration and cold infusion are two types of extraction methods that are conducted at ambient temperature, and all it takes is to add the solvent and then mix. In addition, Koderia also teaches extracting with ethanol. Applicant also argues that Hibi teaches away from the use of ethanol as less amount of ajoene is obtained when ethanol is used. Using ethyl alcohol as one of the solvents in the method of processing garlic is clearly disclosed as a prior art. The amount of ajoene obtained by using ethanol is irrelevant as "ajoene" is not in the claims.

Applicant argues that Sumi and Koderia do not disclose a method of producing antioxidant composition. This is not found persuasive. As evidenced by Albeck et al (US 4,923,697), garlic contains antioxidants (col 1, lines 50-60), therefore, it is inherent that Sumi and Koderia disclose a method of producing antioxidant composition.

Art Unit: 1655

Applicant argues that Sumi does not teach incubation at a temperature less than 30 °C, and Koderá does not teach the incubation step. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Hibi teaches incubation at 4 °C (less than 30 °C) for 3 hours (5 min or longer). Sumi and Koderá references are used only for ethanol extraction and evaporation.

Applicant's arguments have been fully considered but they are not persuasive. The rejection of the record is thus maintained.

### Conclusion

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1655

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qiuwen Mi whose telephone number is 571-272-5984. The examiner can normally be reached on 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry Mckelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**MICHAEL MELLER**  
**PRIMARY EXAMINER**